

We Claim:

1. A method for quantitating hTERT mRNA in a human sample, wherein said method comprises:
  - 5 (a) contacting RNA from said sample with amplification reagents comprising a pair of primers, wherein said pair of primers consists of a first primer that is complementary or substantially complementary to one strand of the double-stranded hTERT gene sequence that is SEQ ID NO: 1 in a region that is either upstream of exon 7 or downstream of exon 8, and a second primer that is complementary or substantially complementary to the other strand of said hTERT gene sequence in a region within exon 8;
  - 10 (b) carrying out an amplification reaction;
  - (c) measuring the generation of amplification products; and
  - (d) determining the quantity of hTERT mRNA in said sample from the results obtained in step (c).
2. A method of Claim 1, wherein said first primer is complementary or substantially complementary to said strand of said hTERT gene sequence in a region within exon 6.
- 20 3. A method of Claim 1, wherein said amplification reaction is a polymerase chain reaction.
4. A method of Claim 3, wherein said first primer is SYC1076 (SEQ ID NO: 2) or SYC1118 (SEQ ID NO: 5) and said second primer is SYC1097 (SEQ ID NO: 4).
- 25 5. A method of Claim 3, wherein said first primer is SYC1118 (SEQ ID NO: 5) and said second primer is SYC1097 (SEQ ID NO: 4).

6. A method of Claim 4, wherein step (c) is carried out using a probe that is complementary or substantially complementary to said amplification products.

7. A method of Claim 6, wherein said probe selected from the group  
5 consisting of CS12 (SEQ ID NO: 6), CS1 (SEQ ID NO: 7), and CS3 (SEQ ID NO: 8).

8. A method for quantitating telomerase activity in a human sample, wherein  
said method comprises:

10 and  
in step (a).

- (a) quantitating hTERT mRNA in said sample using the method of Claim 1;
- (b) determining the telomerase activity in said sample from the result obtained

9. A method for quantitating telomerase activity in a human sample, wherein  
15 said method comprises:

and  
in step (a).

- (a) quantitating hTERT mRNA in said sample using the method of Claim 2;
- (b) determining the telomerase activity in said sample from the result obtained

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10. A method for quantitating telomerase activity in a human sample, wherein  
said method comprises:

25 and  
in step (a).

- (a) quantitating hTERT mRNA in said sample using the method of Claim 3;
- (b) determining the telomerase activity in said sample from the result obtained

11. A method for quantitating telomerase activity in a human sample, wherein  
said method comprises:

(a) quantitating hTERT mRNA in said sample using the method of Claim 4;  
and  
5 (b) determining the telomerase activity in said sample from the result obtained  
in step (a).

12. A method for quantitating telomerase activity in a human sample, wherein  
said method comprises:

10 (a) quantitating hTERT mRNA in said sample using the method of Claim 5;  
and  
15 (b) determining the telomerase activity in said sample from the result obtained  
in step (a).

13. A method for quantitating telomerase activity in a human sample, wherein  
said method comprises:

(a) quantitating hTERT mRNA in said sample using the method of Claim 6;  
and  
20 (b) determining the telomerase activity in said sample from the result obtained  
in step (a).

14. A method for quantitating telomerase activity in a human sample, wherein  
said method comprises:

25 (a) quantitating hTERT mRNA in said sample using the method of Claim 7;  
and  
30 (b) determining the telomerase activity in said sample from the result obtained  
in step (a).

15. A primer that is SYC1097 (SEQ ID NO: 4).

16. A pair of primers for quantitating hTERT mRNA expression in a human sample, wherein said pair of primers consists of a first primer that is SYC1076 (SEQ ID NO: 2) or SYC1118 (SEQ ID NO: 5), and a second primer that is SYC1097 (SEQ ID NO: 4).

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17. A kit for quantitating hTERT mRNA in a human sample, comprising the primer of Claim 15.

18. A kit for quantitating hTERT mRNA in a human sample, comprising a 10 pair of primers of Claim 16.

19. A kit of Claim 18, further comprising a probe selected from the group consisting of CS12 (SEQ ID NO: 6), CS1 (SEQ ID NO: 7), and CS3 (SEQ ID NO: 8).

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20. A kit of claim 18, comprising a pair of primers that is SYC1118 (SEQ ID NO: 5) and SYC1097 (SEQ ID NO: 4), and comprising a probe that is CS12 (SEQ ID NO: 6).

add  
a 1

add  
d4

Add E2